

## CITRUS RESEARCH AND DEVELOPMENT FOUNDATION, INC.

## **Research Management Committee Meeting**

## Minutes

## Thursday, December 1, 2022

A meeting of the Research Management Committee of the Citrus Research and Development Foundation, Inc. was held on Thursday, December 1, 2022, at the Hampton Inn & Suites Conference Room, 22900 Hwy 27, Lake Wales, FL 33859. The meeting was properly noticed and recorded. The meeting was called to order at 10:02 a.m. by Chairman John Updike. Roll was called and a quorum was present. Committee members participating were Larry Black, Holly Chamberlain, Steve Farr, Ned Hancock, Aaron Himrod, David Howard, Ed Leotti, Tom Obreza, Morgan Porter, Daniel Scott, Brian Scully, Shannon Shepp, Buddy Strickland and John Updike.

Also participating were Michael Aerts, Rob Atchley, Scott Adkins, John Chater, Rick Dantzler, Bill Dawson, Manjul Dutt, Gary England, Stephen Futch, Fred Gmitter, Jim Graham, Chris Gunter, George Hamner, David Howard, Audrey Nowicki, Brandon Page, Orlene Guerra Peraza, Jim Syvertsen, Barbara Thompson, Rosa Walsh and Janice Zale.

Mr. Updike noted that the minutes of the September 14, 2022, Research Management Committee meeting were included with the meeting materials and moved for approval of the minutes. The motion was seconded by Ms. Porter and passed.

Dr. Dawson was asked to provide a brief tutorial on CRISPR. Dr. Dutt and Dr. Zale added a few remarks afterward. During the discussion, Ms. Shepp noted that Dr. John Goldberg, an adviser for the DOC, had provided a memo on regulatory matters which she would provide for Mr. Dantzler to distribute to the Committee and Board. Any questions they might have should be submitted to CRDF for compilation and forwarding to Dr. Walsh.

Ms. Nowicki presented a summary of the budget, noting only \$87,000 of the \$1.5M in uncommitted funds in first-year project costs have been utilized to date, and an additional \$330,000 in residuals has been realized so far this year. Mr. Dantzler stated discussions at the Executive Committee meeting indicated their priority was to use uncommitted funds from the current year budget to assist growers with the cost of getting OTC into trees.

The first proposal for consideration was #22-015, Yianni Lagos, Soilcea – Greenhouse and Field Trials of CRISPR-Edited Citrus Varieties. The funding request included capital improvements such as fencing, installed wells and irrigation. Suggestions included reducing the capital expenditures included in the budget and planting the trees at the approved USHRL (USDA transgenic site). Mr. Hancock made a motion to recommend Board approval of the proposal as drafted, and it was seconded by Ms. Porter. The motion passed with two opposing votes, by Mr. Leotti and Mr. Scott.

Proposal #22-016, Dr. Manjul Dutt, UF-CREC, Interstocks proposal. Dr. Scully moved to recommend Board approval and indicated it should be verified that the funding request was adequate. Mr. Leotti seconded the motion and it passed unanimously. Minutes of the Research Management Committee Meeting Thursday, December 1, 2022 Page 2

Proposal #22-017, Dr. Amit Levy, UF-CREC, DDG proposal. In prior discussions, the committee recommended additional products be tested besides DDG; this suggestion was included in the proposal. After some discussion on the three objectives, Dr. Scully made a motion to recommended Board approval of the proposal as presented. It was seconded by Ms. Shepp and passed unanimously.

#22-019, Dr. Manjul Dutt, UF, CREC – Parson Brown proposal. Dr. Scully made a motion for approval, seconded by Mr. Strickland. Dr. Scully suggested getting some of the materials from Whitmore Farm (Donaldson and Tobias), instead of from UC Riverside. Dr. Dutt stated that sixteen germplasms have already been imported from UCR and are currently in his greenhouse, but that he can also add Donaldson and Tobias. Dr. Scully repeated his motion to recommend funding, with the stipulation to include the Donaldson and Tobias trees. The motion was seconded by Ms. Shepp. Dr. Graham shared a slide comparing HLB expression of 5-yr-old Parson Brown trees on UFL4 v. OLL-8 trees on 639 in a Tropicana planting. The motion passed unanimously.

The committee moved on to the pre-proposals. #22-020, Dr. Robert Turgeon, Cornell Univ. – Pre-proposal for Protecting citrus trees from greening with anchored, single-chain antibodies. Mr. Dantzler noted that it had gone through NIFA review but was not funded. Mr. Himrod made a motion to request a full proposal. The motion was seconded by Ms. Porter. Dr. Scully suggested that CRDF seek partners to co-fund, possibly CRB or MAC. The motion passed unanimously.

#22-021, Dr. Nabil Killiny, UF-CREC – Phloem sap pre-proposal. It failed to move forward for a lack of motion.

#22-022, Dr. Yongping Duan, USDA-ARS – Virus identified only in escape trees pre-proposal. Dr. Scully noted that the reference to CMMV was not identified. Ms. Shepp suggested that Mr. Page and Dr. Walsh speak with Dr. Duan to gather more facts as to how this is related to escape trees and request that he re-submit the pre-proposal disclosing more about the virus.

#22-023, Dr. Hailing Jin, UC Riverside – AMP cisgenic citrus pre-proposal for continuing her work that was originally funded by the Citrus Research Board. Dr. Scully suggested if the Board was considering funding, there should be co-funders. Mr. Leotti made a motion to request a full proposal. The motion was seconded by Mr. Scott and passed unanimously.

Mr. Updike noted that Dr. Wang's pre-proposal on reducing oxidative stress (ROS) that was discussed at the September RMC meeting received federal funding.

Mr. Updike reported that Dr. Rushton's proposal on Beauveria fungi that was invited in September was not received by the deadline and therefore was tabled.

Mr. Dantzler discussed CTV registration, noting that IR4 may be willing to move this forward. Potential research that would be required are likely only the market basket study and bee study. Dr. Scully made a motion to proceed with a request that IR4 pursue the CTV registration. The motion was seconded by Ms. Shepp and it passed unanimously.

Dr. Scully introduced Dr. Scott Adkins, Interim Center Director for the USDA Research Lab in Ft. Pierce. He has 23 years of experience in virus and virus-like diseases. He is in rotation with Dr. Erin Rosskoph until a permanent Director is assigned. Minutes of the Research Management Committee Meeting Thursday, December 1, 2022 Page 3

Mr. Dantzler summarized the document for Consideration of Complimentary Work to the Usage of OTC via Directed Research and/or RFP. It was agreed that growers need answers to questions such as application rates, efficacy, Brix and the need for competition in the OTC market. In addition to TJ Biotech, there is a one entity that is expecting to apply for a 24-C label in the spring, plus an additional new company is expected to move forward in this area shortly, thus driving competition.

Various committee members stressed the need for a project with short-term results for growers, as well as projects showing efficacy of OTC, to include data on yield and quality as CRAFT projects do. It was suggested that these projects and applications be overseen by a researcher/consultant/scientist. Mr. Howard made a motion to recommend the board proceed with the directed research and/or RFP to answer the questions posed in the Complimentary Work document, but also proceed with getting funds into a program that could help growers get OTC in trees. The motion was seconded by Mr. Hancock and passed unanimously.

Mr. Page reported that the trees for scion trials are coming along well, but that the rootstock trial in Sebring had a 50% loss from Hurricane Ian. There are replacement trees, but time has been lost and the grower-cooperator will most likely request to be released from his obligations under the contract because of damages his overall citrus business suffered in the hurricane.

Other Business: It was suggested that a general RFP on game changers be presented and that a wide net be cast to attract proposals from non-historic sources.

There were no public comments and with no further business, the meeting was adjourned at 12:45 p.m.

Minutes submitted by Barbara Thompson.